

A COGNITIVE APPROACH TO SIMILE-BASED IDIOMATIC EXPRESSIONS

Alicia Galera Masegosa

University of La Rioja

[aliciagaleramasegosa at gmail com](mailto:aliciagaleramasegosa@gmail.com)

Abstract

This paper provides a detailed analysis of some of the most frequent simile-based idiomatic expressions from a cognitive point of view. In our study we show the necessity to further develop conventional metaphoric and metonymic analysis into more complex patterns of interaction between the two. Furthermore, several metaphors may also interact in the cognitive processes that underlie the understanding of idiomatic expressions, making it necessary to approach many of our examples making use of metaphoric complexes. We will explore the ways in which motivation and transparency may vary in idioms that arise from the same ontological metaphor, both intralinguistically and cross-linguistically. In addition, we will regard hyperbole as a fairly pervasive phenomenon in simile-based idioms.

Keywords: Idiom, metaphor, metonymy, metaphoric complex.

Contents

1. Introduction	4
2. Scope of the study and methodology	77
3. Theoretical background	9
3.1 Classifications of metaphor	10
3.2. Metaphor and metonymy in interaction	13
3.3. Definition and processing of idioms	17
3.3.1. Definition	17
3.3.2. Processing	19
3.3.2.1. Non-compositional models	19
3.3.2.2. Compositional models	20
4. Towards an analysis of simile-based idioms	20
5. Conclusions	40
References	41

1. Introduction

The distinction between literal and figurative language has traditionally relegated the latter to the periphery of linguistic accounts, mainly on the basis of the claim that figurative language is anomalous or deviant. However, it has been argued –especially within Cognitive Linguistics (e.g. Lakoff and Johnson, 1980, 1999) and Relevance Theory (Sperber and Wilson, 1995)– that the so-called figurative uses of language are as frequent (and even more frequent) than the literal ones (see also Vega, 2007; Sperber and Wilson, 2008; Wilson and Carston, 2006, 2008). This is the case of idioms, which are highly pervasive in our everyday speech, and whose meaning is not literal whatsoever (Gibbs, 1994). Traditional views of idioms claim that they are fixed expressions whose meaning is arbitrary and cannot therefore be predicted from the meanings of their constituents. Furthermore, it has been adduced that idioms are often constructed on the basis of dead metaphors, i.e. metaphors that must have been originally transparent and productive but whose form-meaning connections have been

lost over time. From these assumptions, one may infer that the cognitive operations we use for our conceptualization and understanding of the world (namely, metaphor and metonymy) are of no use in the interpretation of idiomatic expressions. However, the notion of idiom(s) and the considerations regarding their processing operations have evolved considerably. Cognitive approaches advocate that the distinction between literal and figurative language can no longer be maintained. The distinction between conventional and non-conventional language largely relies on the assumption that conventional language is the one that we use in our everyday speech, while non-conventional language exclusively concerns literary texts and rhetorical discourse. Nevertheless, everyday expressions like *I have butterflies in my stomach* are not restricted to the literary realm at all, and their meanings cannot be said to be literal. Cases of this kind underscore an inconsistency regarding the distinction between conventional and non-conventional language. As part of a ‘special’ use of language, idioms have been traditionally regarded as linguistic units that are larger than words and that are attributed arbitrary meaning. This view of idioms is in line with those approaches to the processing of idioms called *non-compositional models*, which claim that the meaning of idioms is arbitrary and always independent of the meaning of its constituent parts, so that they need to be learned by heart (Bobrow and Bell, 1973; Swinney and Cutler, 1979; Schweigert and Moates, 1988, among others). In turn, *compositional models* argue that the meaning of idioms is not completely arbitrary. In fact, they defend the view that the meanings of the words that make up an idiomatic expression contribute to a certain extent to its overall figurative meaning (Cacciari and Glucksberg, 1991, 1994; Fillmore et al., 1988; Gibbs, 1990, 1994, 1998; Gibbs and Nayak, 1989; Gibbs and Van Orden, 2003; Glucksberg, 1991, 2001; Glucksberg et al., 1993; Keysar et al., 2000; Lakoff, 1987; Lakoff and Johnson, 1990). Some of these authors (especially Lakoff and his followers) highlight the essential role of metaphor and metonymy in the interpretation of the so-called figurative meaning (see also Geeraerts 2003).

However, the relevance of metaphor and metonymy as conceptualizing tools has not always been acknowledged. Traditional views considered these to be deviant uses of language whose main purpose was merely to embellish literary texts. Like idioms, metaphor and metonymy were also considered to be a special use of language, that is, literary language, with metaphor and metonymy belonging to restricted and somehow

secondary areas of study. From the times of Socrates and Plato metaphor and metonymy were analyzed as rhetorical tropes, that is, as parts of persuasive discourse and regarded as distinct from straightforward speech (Fogelin, 1988; Harris and Taylor, 1996; Way, 1991). Furthermore, metaphor and metonymy were regarded merely as linguistic issues, without taking into consideration their impact on conceptualization. Summing up, the importance of idioms on the one hand and metaphor and metonymy on the other has been underestimated.

The emergence of Cognitive Linguistics meant a challenge to the standard views of metaphor, metonymy and form-meaning relationships among others. This kind of approach departs from the assumption that language is a reflection of the patterns of organization of our thoughts, so the study of language involves the description and analysis of patterns of conceptualization (Evans and Green, 2006). This new view of the study of language arose from the work of Lakoff and Johnson (1980), further developed in Lakoff (1987, 1993), Lakoff and Turner (1989) and Lakoff and Johnson (1999) Their contribution involved many changes in very important aspects of the study of language, such as the development of *Conceptual Metaphor Theory*, or CMT, which has been followed and subsequently improved over the years by various scholars. A necessarily non-exhaustive list would include the following: Barcelona (2000, 2005), Gibbs (1994), Gibbs and Steen (1999), Kövecses (1996, 2000, 2002, 2005), Fauconnier and Turner (1994, 1998, 2002), Steen (2007) and Ruiz de Mendoza and his collaborators (e.g. Ruiz de Mendoza, 1997, 1999, 2008; Ruiz de Mendoza and Díez, 2002; Ruiz de Mendoza and Otal, 2002; Ruiz de Mendoza and Mairal, 2007). The developments of this theory made by Ruiz de Mendoza (1997) and Ruiz de Mendoza and Díez (2002) regarding the role of metaphor and metonymy in conceptual interaction, and by Ruiz de Mendoza (2008) concerning metaphoric chains, more recently referred to as *metaphoric complexes* (Ruiz de Mendoza and Mairal, 2010), are particularly relevant for our study, since they provide the necessary tools to determine the cognitive grounding of a large number of idioms thereby allowing us to come up with a more refined account of our object of study.

2. Scope of the study and methodology

The present paper is in line with the above-mentioned cognitive approach to language, and sets out to corroborate that idioms can indeed be analyzed in terms of cognitive operations (cf. Herrero, 2009; Ruiz de Mendoza and Pérez, 2003; Ruiz de Mendoza and Peña, 2005; Ruiz de Mendoza, 2010), especially metaphor and metonymy, not only in isolation but also in their mutual interaction. We will refine the existing accounts by making use of the explanatory tools mentioned above. Furthermore, we will demonstrate that these cognitive operations are not restricted to the understanding of idiomatic expressions regarding mental states and emotions, as has been suggested by some authors (Kreuz and Graesser, 1991; Eizaga Rebollar, 2002).

The fact that very little attention has been paid to simile-based idiomatic expressions has led us to select these as our object study. Our investigation is primarily concerned with showing the descriptive and explanatory adequacy of cognitive analyses in the study of idioms that involve emotions/mental states. It is true that much of the emphasis in the analysis of idioms has been placed on emotion metaphors (Kövecses, 2000, 2002; Kövecses and Szabó, 1996). However, this should not by any means be taken to mean that cognitive approaches cannot be duplicated for other kinds of reasoning processes and expressions. This paper is in full consonance with the stance taken by Kövecses and Szabó (1996) in the sense that it advocates that most idioms bear a great deal of systematic cognitive motivation in their interpretation. However, their analysis is largely restricted to emotion metaphors and thus needs to be expanded. Another aspect that will be subjected to closer scrutiny is the fact that they treat metaphor and metonymy separately and in a rather simplistic way, neglecting the complex patterns of interaction that may arise between them. An added bonus of our approach is the fact that we base our selection of examples not only on metaphor and/or metonymy types (e.g. emotion metaphors, ontological metaphors, etc.) but also on a largely neglected constructional type (simile), which will pave the way for the discussion of a wider range of conceptual patterns.

Idioms have been sampled from a wide variety of sources, including bilingual dictionaries (*The Oxford English Dictionary*), monolingual dictionaries (*The Longman Dictionary of Contemporary English*) and dictionaries of idioms (*A Dictionary of Everyday Idioms*, *Idioms Organizer*, *A Dictionary of American Idioms*). In our

preliminary analysis it was observed that most simile-based idiomatic expressions in our corpus of analysis were based on either ontological or situational metaphors. Even though one might initially assume that ontological metaphors are fairly simple as regards the cognitive processes that rule their interpretation, we have found that an exhaustive and careful analysis was needed, as the complexity of idioms based on ontological metaphors is highly variable. Furthermore, there are many cases in which the same ontological metaphor gives rise to several simile-based idioms whose cognitive operations range from a straightforward one-correspondence metaphoric mapping to complex patterns of conceptual interaction. Thus, we have grouped our examples into the most basic ontological pattern underlying them. For example, we will talk about the various idiomatic expressions that arise from the ontological metaphor (e.g. *John is a pig*, meaning *John eats like a pig*, *John sweats like a pig*, etc.) that need different cognitive operations for their interpretation. This takes us to the next step, that is, the analysis of simile-based idioms that make use of situational cognitive models. Within this category, we have found that hyperbole plays a crucial role in the construction of idioms.

This study analyzes the interactional conceptual patterns regardless of the degree of complexity that, as advanced above, may significantly vary within the same group of idioms. In any case, the prevalence of certain interactional patterns within each category will be pointed out and conveniently schematized. In our analysis we have followed the account of metaphor-metonymy patterns of conceptual interaction discussed in Ruiz de Mendoza and Díez (2002) and Ruiz de Mendoza and Otal (2002). The strength of this approach to metaphor and metonymy in interaction has been recently validated in a study carried out by Urios-Aparisi (2009) in the domain of multimodal metaphor. We have productively combined the former account with the more recent discussion of metaphorical complexes provided in Ruiz de Mendoza (2008) and Ruiz de Mendoza and Mairal (2010). Special attention will be paid to a number of cases that somehow shed new light on these matters.

The structure of the rest of this article is as follows. First, in Section 3 we outline the main contributions to the development of cognitive approaches involving the processing of idioms, and of metaphor and metonymy as tools for the analysis of language in general and of idiomatic expressions in particular. In section 4 we present a

detailed analysis of idioms that take the structure of a simile. Finally, section 5 recapitulates the main findings of this study.

3. Theoretical background

One of the goals of Cognitive Linguistics is to determine and classify the systematic processes that allow a person to understand abstract concepts in terms of more tangible, physical experience. Lakoff (1987, 1989) postulated *Idealized Cognitive Models* (ICMs henceforth) as cognitive mechanisms in terms of which we organize our knowledge of the world. He described four structuring principles for ICMs: *propositional structure*, *image-schematic structure*, *metaphoric* and *metonymic* mappings. Propositional ICMs (or *frames*; cf. Fillmore, 1985; Fillmore and Atkins, 1992) are based on sets of predicate-argument descriptions (e.g. a mother is a woman; a mother has children; a mother takes care of her children, etc.: cf. Lakoff, 1987; Taylor, 1995). Image schemas (Johnson, 1987) are topological constructs that arise from our sensory motor experience with the world (e.g. notions such as in/out, up/down, motion along a path, part-whole relations, etc.; cf. Peña, 2003, 2008; Hampe, 2005). Metaphors are described as sets of correspondences across discrete conceptual domains (e.g. *He is drowning in sorrow*, maps a liquid onto a negative emotion, the container onto a situation, being immersed in the liquid onto the devastating effects of affliction). Metonymies are one-correspondence mappings (understood as ‘stands for’ relationships) within a single conceptual domain (e.g. ‘shoes’ in *Tie your shoes* stands for ‘shoe laces’, which are a part of what we understand by shoes) (see Ruiz de Mendoza, 2000). ICMs have been further sub-classified by Ruiz de Mendoza (1996) into *operational* (i.e. metaphor and metonymy) and *non-operational* (i.e. frames and image-schemas) cognitive models. This distinction captures the processual nature of metaphor and metonymy, which always works on the basis of propositional (i.e. frames) or image-schematic ICMs. With these premises in mind, we will follow Ruiz de Mendoza and Díez’s (2002) description of interaction patterns between metaphor and metonymy. According to these authors, ICMs combine and interact in principled ways that will be addressed in some detail in section 3.2. In this section we will also address the description of *metaphoric complexes* (Ruiz de Mendoza, 2008), i.e. when two or more metaphors combine for the

understanding of a given expression. As we will show, metaphoric complexes are essential for a fully-fledged analysis of certain idiomatic expressions. We will thus attempt to combine several complementary approaches with the aim of providing a preliminary set of systematic patterns of conceptual operations in the processing of simile-based idioms.

3.1 Classifications of metaphor

In *Metaphors We Live By* (1980), Lakoff and Johnson present a tentative classification of metaphors, providing many examples of each type. They divide metaphors into three basic categories, according to the nature of the source domain: *orientational* (those that relate abstract concepts to experiences involving spatial orientation in order to help us understand these concepts on experiential grounds; e.g. MORE IS UP); *ontological* (those that allow us to speak about abstract entities in terms of physical objects, e.g. *I have a lot of love in my heart*) and *structural* (in which two concepts, one more abstract than the other, are interrelated; e.g. LOVE IS A JOURNEY). These three categories arise from the analysis of only one of the aspects that may be analyzed in metaphors, that is, the source domain. The category of orientational metaphors was later enlarged in order to include both spatial and topological constructs. Lakoff and Turner (1989) named the members of this new group *image-schematic metaphors*. In this work, they also put forward the concept of the *Great Chain of Being*, a folk model of nature by virtue of which entities are organized hierarchically in such a way that each level of the chain inherits the properties of the lower ones and incorporates a new one that makes each level more complex. In the Great Chain, each level has a defining property that is not inherited by the levels below. For example, humans are rational (but not animals, plants or things); animals (but not plants or things) have instinctual behavior; plants (but not things) are living entities, and so on. This classification has been improved by Ruiz de Mendoza and Otal (2002) and by Peña (2003). These authors argue for the necessity to recognize the importance of metonymy within cognitive approaches to language and thought modeling. While the analysis of metaphor had played a central role in the reaction against the traditional view of conceptualization, which drew a sharp line between literal and figurative language, metonymy had nonetheless been unduly neglected. Ruiz de Mendoza and Otal (2002) follow three different criteria in their

classification of metaphor: (i) the nature of the source domain; (ii) the complexity of the mapping system, as determined by the number of correspondences in the mapping; (iii) the nature of such correspondences. They claim that depending on the number of correspondences involved in the metaphoric mapping, a basic distinction should be drawn between *structural* and *non-structural* metaphors. The former always involve more than one correspondence (e.g. LOVE IS A JOURNEY, in which we find several correspondences like ‘lovers are travelers’, ‘the love relationship is a vehicle’, ‘difficulties in the relationship are impediments to travel’, ‘lovers’ common goals are the destination’, and so on), while in the latter we only find a single correspondence. Non-structural metaphors include Lakoff and Johnson’s orientational metaphors (e.g. MORE IS UP) as well as ontological metaphors (e.g. PEOPLE ARE ANIMALS). Furthermore, structural (many-correspondence) metaphors are subdivided into *situational* and *non-situational* metaphors. In turn, non-situational metaphors may be *image-schematic metaphors* (in which the source domain is made up of one or more image-schemas, e.g. ORGANIZATION IS PHYSICAL STRUCTURE), *image metaphors* (the source and the same domain are images that share a certain degree of resemblance, e.g. *My wife... whose waist is an hourglass*, from Lakoff, 1993) and *propositional metaphors* (the abstract concept of the target domain is understood in terms of a non-situational construct in the source domain, as in ARGUMENT IS WAR). Image and image-schematic metaphors are topological, while propositional metaphors are non-topological. Finally, situational metaphors require the use of a metonymic mapping within the metaphoric source domain that expands a fragment of a situation into a complete one. If this situation can be observed externally we have a *scenic* situational metaphor (e.g. *He ran with his tail between his legs*). If it cannot be observed in such a way, we get a *non-scenic* situational metaphor (e.g. *He had his heart in his mouth*). This classification is diagrammed in figure 1 below.

If we take into account the nature of the mapping, following Grady (1997), we may distinguish between *resemblance* and *correlation* metaphors; the former are based on perceived similarities between source and target (e.g. the enamel of teeth resembles the coating of a pearl), while the latter are grounded in the conflation of concepts (e.g. anger and heat are conflated on the basis of our experience of feeling physical heat when being enraged).

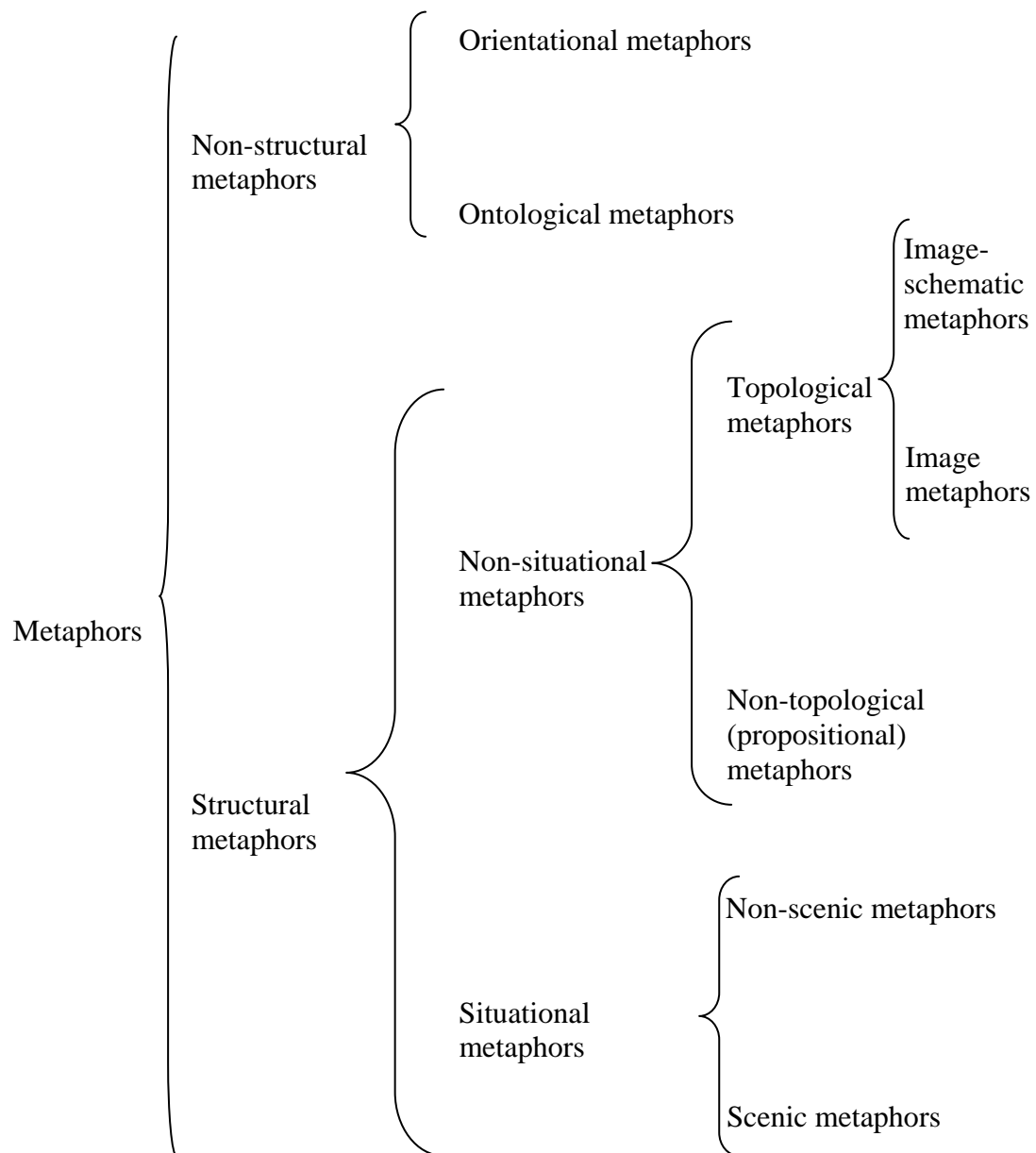


Fig. 1. *Metaphor types according to the nature of the source domain* (Ruiz de Mendoza and Otal, 2002: 52).

3.2. Metaphor and metonymy in interaction

The classification above will serve us as a guiding tool in our analysis of idiomatic expressions based on similes. However, the cognitive operations described and classified above are not always sufficient. We need more sophisticated tools for the cognitive analysis of many idiomatic expressions. These tools arise mainly from the combination of two or more metaphors (metaphoric complexes) and from the interaction of metaphor and metonymy.

As we briefly outlined above, metaphoric complexes have been defined by Ruiz de Mendoza (2008) as the conceptual interaction between two (or more) metaphors. There are two kinds of metaphoric complexes. In one kind of complex, a metaphor is built into the source-target structure of another metaphor. A case in point is the expression *She got the idea across to me*, whose meaning impact is accounted for by the integration into the metaphor IDEAS ARE (MOVING) OBJECTS of the metaphor UNDERSTANDING AN IDEA IS PERCEPTUALLY EXPLORING AN OBJECT. The incorporation of the latter metaphor into the conceptual layout of the former is a consequence of the fact that the main metaphor requires further elaboration of the basic correspondence between understanding and receiving an object. This is so since just gaining access to (i.e. receiving) a moving object does not necessarily involve knowing its characteristics.

SOURCE →	TARGET
Causer of motion	Communicator
Causing motion	Communicating
Object of caused-motion (moving object)	Idea
Destination of motion (receiver of the moving object)	Addressee
Receiving the moving object	Having access to the idea
Perceptually exploring the object	Understanding the idea

Fig. 2. *Single-source metaphorical complex in She got the idea across to me*

Another kind of combination allows two source domains to be mapped onto a single target domain, thereby combining conceptual inferences that arise from two distinct basic metaphors. That is the case of the following example of chaining (Ruiz the

Mendoza and Mairal, 2010) in figure 3, which results in a metaphoric complex: *He slapped some sense into me* ('He caused me to acquire some sense by slapping me', i.e. 'He slapped me and in so doing caused me to acquire some sense').

SOURCE →	TARGET	← SOURCE
Causer of motion	Effector ('he')	
Causing motion	Effecting ('caused to acquire')	
Destination of motion	Effectee ('me')	New possessor of an object
Object of caused-motion (moving object)	New property ('some sense')	
	Resultant state (acquiring the new property of 'having some sense')	Gaining possession of an object
Manner of causing motion	Manner of effecting (slapping)	

Fig. 3. *Double-source metaphorical complex in He slapped some sense into me.*

As regards the interaction patterns between metaphor and metonymy, Ruiz de Mendoza and Díez (2002) posit five different patterns in which metaphor and metonymy may interact: (i) *metonymic expansion of a metaphoric source* (e.g. *to beat one's breast*); (ii) *metonymic expansion of a metaphoric target* (e.g. *to knit one's brows*); (iii) *metonymic reduction of* (one of the correspondences of) *the target domain of a metaphor* (e.g. *to win someone's heart*); (iv) *metonymic expansion of* (one of the correspondences of) *the target domain of a metaphor* (e.g. *to catch someone's ear*); (v) and *metonymic expansion of one of the correspondences of the source domain* (e.g. *to bite the hand that feeds you*)¹. These interaction patterns improve on a previous study by Goossens (1990), who proposes an alternative classification: (i) *metaphor from metonymy*, where an original metonymy develops into a metaphor (e.g. *to beat one's breast*); (ii) *metonymy within metaphor*, as in *to bite one's tongue*, where the tongue stands for a person's ability to speak; (iii) *demetonymization inside a metaphor*, as in *to pay lip service*, where 'lip service', which stands for 'speaking', loses its metonymic import so that the expression makes sense; (iv) *metaphor within metonymy*, which occurs when a metaphor is used in order to add expressiveness to a metonymy, as in *to be on one's hind legs*, where "hind" brings up the metaphor PEOPLE ARE ANIMALS.

¹ For a detailed analysis of these examples see Ruiz de Mendoza and Otal, 2002, section 3.3.2.

Ruiz de Mendoza and Otal (2002) have addressed the main problems in Goossens's proposal. One crucial difference between Goossens' proposal and the one in Ruiz de Mendoza and Díez (2002) is that in the latter metonymy is always a part of metaphor (either the source or the target). In Goossens' account there is only one case where metonymy is recognized to be a part of metaphor. The rest of the proposed cases of interaction are misled. Thus, *to beat one's breast* has a metaphoric source where a person beats his/her breast in order to show sorrow or regret and the target has a person that makes an open show of his/her regret without necessarily beating his/her breast. This means that, in order to construct the metaphoric source domain, we need the breast-beating action to afford access to the whole scenario where a person uses breast-beating as a way to make an evident demonstration of remorse; that is, we construct the metaphoric source (but not the target) on the basis of expanding part of a scenario into a whole scenario. While the metonymy is thus part of the metaphoric source –the first of the possibilities discussed by Ruiz de Mendoza and Díez (2002)–, it is somewhat inaccurate to say that the metaphor originates in a metonymy. In our view, a more important problem arises in Goossens's contention that a metonymy may lose its value as such within a metaphoric frame. It is not clear at all whether Goossens actually argues that the metaphor is the reason why the demetonymization process occurs or whether it is simply a contributing factor. In any case, an expression such as *pay lip service* is better accounted for as an example of metonymic reduction of one of the correspondences of the target domain of a metaphor whose source domain is based on the 'paying' frame, which features at least a payer, a payee and a payment. This structure maps onto a target domain where the payment is 'lip service', which stands for 'service with words' rather than with actions. In this case, there is no demetonymization but simply a metonymic shift inside a metaphoric target. Finally, in *to be on one's hind legs* does invoke the metaphor PEOPLE ARE ANIMALS, but as an element of a more complex situational metaphor in which the source domain depicts a horse rearing up when feeling in danger of being attacked. In this metaphor, the target domain is the person that stands up to argue in public when his views come under attack from someone else. To this analysis, provided by Ruiz de Mendoza and Otal (2002), we may add one important observation: the interactional schema is essentially the same as in e.g. *beat one's breast*, except for the integration of PEOPLE ARE ANIMALS within the general metaphorical scenario that we have described. Therefore, we have a

combination of two metaphors and the metonymic development of the integrated metaphoric source (see figure 4 below):

METAPHOR	
SOURCE →	TARGET
a horse raising its forelegs in a threatening way when feeling under (physical) attack	an arguer raising his arms in a threatening way when feeling under (verbal) attack
↑ METONYMY rearing up on its hind legs	standing up on his rear and legs

Fig. 4. *Metonymic expansion of a single-source metaphorical complex in He's on his hind legs*

This analysis integrates insights from the account of metaphor-metonymy interaction discussed in Ruiz de Mendoza and Díez (2002) and Ruiz de Mendoza and Otal (2002) into the account of metaphorical complexes provided in Ruiz de Mendoza (2008) and Ruiz de Mendoza and Mairal (2010). It must be noted that the horse-arguer metaphor is not a typical ontological (or Great Chain of Being) metaphor, but a situational model which builds upon the ontological mapping PEOPLE ARE ANIMALS and whose complete source domain is accessed on the basis of partial structure (the image of the animal rising on its hind legs). When it is not part of a larger metaphorical framework, PEOPLE ARE ANIMALS is used to put in correspondence human and animal attributes. As noted in Ruiz de Mendoza (1998), such attributes are often behavioral (*She's a cow* 'unpleasant', *She's a dragon* 'unfriendly', *He's a fox* 'a deceptive person', *He had a sheepish look on his face* 'embarrassed') but can also refer to physical characteristics: *He's a bull of a man* 'a heavyset man'. In a sentence like *He was on his hind legs*, the term "hind", which is used with quadrupeds, is figuratively attributed to a man. This differentiates this metaphor from one like *He beat his breast*,

where the source is also constructed through metonymic expansion, but where there is no metaphoric complex, i.e. the source contains no figurative ingredient.

In what follows, we will examine examples from our corpus in the light of the patterns discussed in Ruiz De Mendoza and Díez (2002), and will broaden the array of possibilities of combination on the basis of our corpus.

3.3. Definition and processing of idioms

3.3.1. Definition

The concept of idiom is often defined in fuzzy terms and with lack of specific boundaries, and it is used to refer to structures that range from phrasal expressions to proverbs. Some authors claim that idioms are specific lexical expressions whose syntactic form is fixed or semi-fixed, and whose semantic structure is opaque to a certain extent (McCarthy, 1992; Moon, 1998a, 1998b). Those linguists that advocate for a very restricted view of this matter state that idioms are strings of more than one word whose conventional meaning can never be recovered from the meanings of its individual components (Everaert, et al., 1995; Fernando, 1996; Hernando Cuadrado, 1990; Nunberg, et al. 1994; Strässler, 1982). These authors argue that idioms are semantically opaque expressions whose overall meaning is not equivalent to the sum of their parts. Therefore, idioms are not analyzable either syntactically or semantically. According to Fillmore et al. (1988), an idiom is an expression endowed with a specific interpretation by the speakers of a community. They distinguish between *encoding* and *decoding* idioms. Encoding idioms are those that can be understood by speakers of a language without having learned them beforehand, but that are not recognized as fully conventional, e.g. *answer the door*. Decoding idioms are expressions that need to be learned beforehand in order to understand their meaning, e.g. *kick the bucket*.

In our view, idioms are those expressions that bear a certain degree of fixation and whose meanings need to be deciphered in terms of cognitive operations, such as metaphor and metonymy, to a greater or lesser extent. However, given that idioms vary as regards their degree of fixation/predictability, they should be best handled in terms of a continuum. At one of the extremes of this continuum we find a number of idioms

whose meaning is totally unpredictable from the meaning of their parts individually, which means that they need to be learned as fixed expressions. This is the case of *opaque idioms* (e.g. *kick the bucket*). Opaque idioms should thus be considered as special cases of idioms that assimilate to individual words in the sense that their syntactic properties and meanings are exclusively related to the form that comprise them. However, this view should be restricted to a limited number of idioms. Nor can it be taken as criterial to define idioms. The next group in the middle of the continuum is made up of idioms whose parts convey information that can somehow be interpreted with the aid of cognitive operations, but may still be learned as a whole. An example of this kind of idiom is *spill the beans*. This expression is highly conventionalized, and its meaning cannot be recovered from the literal interpretation of its constituents. Nevertheless, metaphorical correspondences can be established between ‘spill’ and ‘reveal’, and between ‘beans’ and ‘secrets’, so that the individual components of the expression aid in the overall interpretation. In fact, the structure of the expression may be altered in some contexts and for several purposes. For instance, a speaker who is aware of the fact that s/he should have not revealed certain information and who intends to apologize in an informal way may utter *Ooops, I may have spilled some of the beans*. However, it is not clear whether speakers of a language have access to this interpretation on the basis of a direct form-meaning connection or by taking into account the individual parts of the idiom. This issue is not, however, the focus of the present study. Rather, our aim is to demonstrate that cognitive processes may play a role in the understanding of idiomatic expressions, independently of the fact that speakers may also store the meaning of certain constructs as wholes. We should thus assume that idioms do not necessarily need to be analyzed as independent units because we can establish principled conceptual patterns and categories within which several idiomatic expressions fall. The other extreme of the continuum leads us to consider a wide range of expressions that are more likely to be interpreted by using cognitive operations as the main tool of analysis: *transparent idioms*. These should be understood as expressions that are fixed to a certain extent and whose parts are determinant in the overall interpretation. That comes only after a number of more or less complex cognitive operations have taken place, e.g. *He is spitting fire*. In this example, the conceptual metaphor that underlies the idiomatic expression is ANGER IS FIRE, which puts in correspondence some of the physiological symptoms of anger (e.g. excessive bodily

heat as if the body were burning inside) with the underlying emotion (see Kövecses, 2000, 2005, for a detailed analysis of anger metaphors).

3.3.2. Processing

As regards the processing of idioms, we have already introduced the notions of non-compositional and compositional models. Let us address and explore some of them in further detail.

3.3.2.1. Non-compositional models

These models advocate that the meaning of an idiom is fixed in memory, so it is recovered as a whole when the expression is uttered, leaving no room for any kind of cognitive operation. Within non-compositional models, the *Literal Processing Model* (Schweigert and Cutler, 1979) suggests that the processing of idiomatic expressions is different from the processing of literal expressions, and only gets activated when the literal meaning fails to provide an appropriate meaning for the expression. This would mean that the processing of literal meanings would take less time than the processing of figurative meanings. However, several scholars have conducted experiments impinging on the processing of idioms that indicate that the default interpretation is the idiomatic meaning, not the literal one (Gibbs, 1980, 1985; Titone and Connine, 1994). The *Direct Access Hypothesis* (Cacciari and Tabossi, 1988; Gibbs, Nayak and Cutting, 1989; Glucksberg, 1993), by contrast, makes the opposite claim: the literal meaning of an idiom is activated only if the figurative interpretation proves to be inappropriate, due to the strong figurative meaning conventionally assigned to idiomatic expressions. Furthermore, the quick activation of the figurative interpretation makes it possible for idiomatic expressions to be stored in memory as individual lexical units, so they are not processed as series of individual words (Chomsky, 1980; Keysar and Bly, 1995; Nicolas, 1995; Ortony et al., 1978; Pinker, 1994, 1999; Pulman, 1993; Schweigert and Moates, 1988). The *Lexical Representation Hypothesis* (Swinney and Cutler, 1979) states that there are no differences concerning the access to, and recovery of, literal and figurative language. Individual words and the lexical access to the whole expression are analyzed at the same time. Nevertheless, the processing of the literal meaning takes

longer, since a lexical, syntactic and semantic analysis of each component is necessary. There seem to be some inconsistencies in this theory, especially as regards the shorter time of processing for the figurative meaning, which clashes with their assumption that both literal and figurative meanings are processed in the same way and at the same time.

3.3.2.2. Compositional models

As stated above, compositional models argue that the individual components of idiomatic expressions systematically contribute to the understanding of the overall meaning. Let us briefly outline some of these models. According to the *Configuration Hypothesis* (Cacciari and Glucksberg, 1991; van de Voort and Vonk, 1995), the processing of idioms is literal until the moment in which we have enough information to recognize the idiomatic expression. On this view, we process the literal meaning of individual words, even if it may not be relevant for the understanding of the whole expression. The *Idiom Decomposition Hypothesis* (Gibbs, 1990) suggests that idioms are represented in the mental lexicon in different ways depending on the semantic analyzability of its individual components. If we assume that idioms have only one semantic representation, there is no way of explaining the syntactic flexibility of certain idioms. This model states that speakers analyze idioms from a compositional perspective because they acknowledge the metaphoric mapping from a source to a target domain. Cognitive Linguistics, as we have already discussed, allies itself closely with compositional models.

4. Towards an analysis of simile-based idioms

This paper is devoted to the analysis of those idioms whose overall meaning can be inferred by combining the meanings of their parts in a certain way, that is, idioms whose degree of motivation/predictability is fairly high. However, we will see that the cognitive operations that rule the interpretation of this kind of idiomatic expressions as well as their degree of transparency may vary. Transparency depends not only on decomposability, but also on the extent to which certain parameters are culturally conventionalized. For instance, it is highly conventional to think that the most salient

characteristic of an elephant (when used in the description of human beings) is its heavy weight or its huge size.

Within decomposable idioms, it is only logical to think that similes are the most likely to bear a high degree of transparency. However, even if this is the case for many idioms, we will see that there are also idiomatic expressions whose structure follows that of a simile in which transparency is absent.

Those idioms that are constructed on the basis of a simile are apparently the ones that have the lowest degree of complexity in the cognitive operations involved in their understanding. We may surmise that they usually follow the pattern of a one-correspondence metaphoric mapping. Nevertheless, our examples prove this assumption to be false in many cases. Most similes are based either on ontological (i.e. Great Chain of Being) or situational metaphors. In other words, some of these idiomatic expressions make use of an ontological metaphor, that is, there is a mapping of a property of an entity from the source onto the target domain, while other expressions are based on the mapping of a real/imaginary situation conventionally associated to the entity of the source domain. However, this does not mean that similes derived from ontological metaphors are always straightforward one-correspondence mappings from the source to the target domain. Therefore, there is a difference between those idioms that exploit a linguistic relation of identity/similarity and those that make use of a typical/conventional situation. Let us see them in turn.

In our corpus of analysis, the vast majority of the idioms whose structure is that of a simile are based on ontological metaphors. As Lakoff and Turner (1989) claim, ontological metaphors follow the Great Chain of Being model; that is, in a hierarchy in which human beings are at the top, each part on the chain inherits features from the lower ones, and incorporates new characteristics that make them superior. From this assumption we get an array of metaphors: PEOPLE ARE ANIMALS, PEOPLE ARE PLANTS, PEOPLE ARE COMPLEX OBJECTS, PEOPLE ARE NATURAL PHYSICAL THINGS. Let us consider the following instantiations of the metaphor PEOPLE ARE ANIMALS:

- (1) Peter is a lion.
- (2) John is a shark.
- (3) Harry is a vulture.

These two metaphorical expressions use an attribute of the animal in order to state something about a person. Example (1) maps the courage of a lion onto a feature of John's personality, while (2) maps the voraciousness and predatory nature of sharks. Example (3) maps the opportunistic nature of vultures that arises from the fact that they are carrion-eating animals. In these cases, there is only one characteristic of the animal that is conventionally associated to human behavior. In this respect, we should bear in mind that not every quality of the physical entity in the source domain is susceptible of being mapped onto the target domain. As Lakoff (1993) points out, metaphors highlight certain aspects of concepts and hide others. Sentences (1), (2) and (3) are examples in which there is only one feature of the animal that can be applied to a human being. In addition, it is obvious that the features used in the mapping are easily identifiable and demonstrable in the animal. In this respect, consider examples (4) to (7) below:

- (4) Mary is a cow.
- (5) Jack is a rat.
- (6) He is as blind as a bat.
- (7) He is as happy as a lark.

Examples (4) and (5) are statements about Mary's silliness and Jack's meanness, respectively. Even though these attributes are not explicitly mentioned, they are conventionally associated to cows and rats, respectively. The link between the attribute and the animal in these examples is not, however, as clear as it was in (1), (2) and (3). The reasons for considering cows to be fool and rats to be undesirable creatures is not so obvious. Nevertheless, physical features and slow movements in the case of cows contribute to the association of this animal with stupidity, while behavioral aspects (illness transmission, stealing food) trigger the connection between rats and negative connotations. In (6) and (7), the features of the animal that we want to use in our description of a human being are mentioned. In our view, they need to be mentioned due to the fuzzy connection between feature and reality: bats are not blind; in fact, they enjoy a sensitive vision that allows them to see more when there is not much light. In much the same vein, there is no empirical reason that leads us to think that larks are happy. In these cases, cultural conventions are essential for the association, and we may envisage a certain degree of arbitrariness in these associations. One may argue that larks

are connected to happiness because of their ability to fly and thus enjoy freedom. However, every winged animal shares those characteristics, but we do not find expressions like “as happy as a sparrow” or “as happy as a robin” in everyday speech. For whatever reasons, larks are related to happiness to a certain extent. Consider also other idiomatic expressions like *What a lark* (when something is funny) or *To do something for a lark* (to do something in order to have a good time). So even though the lark-happiness and bat-blindness associations are not totally straightforward, they become highly entrenched from their frequent conventional use. However, there are other English simile-based idioms related to happiness in which the degree of motivation can be said to be null, for instance *He is as happy as Larry* or *He is as happy as a clam*. There are thus several idioms that express the same idea of happiness with varying degrees of motivation. This is also the case in the following examples:

- (8) It is as easy as ABC.
- (9) It is as easy as pie.
- (10) It is like shooting fish in a barrel.

Examples (8) and (9) share the same syntactic structure. However, (8) bears a certain degree of transparency that is absent in (9): it is easy to think that learning something like ABC is an easy task, but there is no apparent connection between something easy and pie. In turn, the syntactic structure of (10) is different, and so it is its cognitive analysis. The adjective ‘easy’ is not mentioned in (10), because the degree of motivation is higher than in (8), which is somehow motivated albeit to a lesser extent, and (9), in which the motivation is not straightforward. In the case of (10), the situation invoked, that is, shooting fishes that are confined to such a small space as a barrel, is a situation in which success is guaranteed, so there arises an immediate connection between the easiness of the mentioned situation and the easy success of the situation for which the idiom is used.

We should also bear in mind that there are simile-based idiomatic expressions whose meaning is apparently arbitrary, but whose creation was motivated by facts that we may ignore. This is the case, for instance of *He is as mad as a hatter*. The association of hatters with craziness comes from the neuro-toxic effects of the mercury that was used for the making of hats in the XIX century. Another idiom about craziness whose

motivation is more transparent is *He is as mad as a March hare*, which connects the excited behavior of hares in March (their mating season) with the crazy ways of a person.

Motivation may also vary cross-linguistically. The Spanish counterpart of *He is as happy as a lark* is *Es más feliz que una perdiz* (lit. ‘He is happier than a partridge’). In this case, the selection of one bird to the detriment of the rest is determined by a rhyming pattern. In fact, Spanish also has the expression *Es más feliz que un regaliz* (lit. ‘He is happier than licorice’), which follows the same pattern. Another way of expressing happiness or joy in Spanish by means of a simile-based idiomatic expression is *Está como unas castañuelas* (lit. ‘He is like castanets’). The motivation that triggers the selection of the object in which the simile is based is different here: castanets are used for certain types of Spanish dancing, so a conventional connection is established between them and happy party times. There is a PART FOR WHOLE metonymy in which an object stands for the whole situation in which it is used. This metonymy interacts with the Great Chain of Being metaphor PEOPLE ARE OBJECTS. This interaction falls into and can be schematized as follows:

METAPHOR	
SOURCE →	TARGET
OBJECTS	PEOPLE
Situations in which castanets are played <div style="text-align: center;"> ↑ METONYMY </div>	Happy situations
Castanets	

Fig. 5. *Metonymic expansion of a single-source metaphorical complex in Está como unas castañuelas (lit. ‘He’s like castanets’)*

So far, we have analyzed idiomatic expressions based on an ontological metaphor in which there is only one correspondence available for the metaphorical mapping. In these cases, the A is B structure is preferred to the simile. In fact, if we say *John is like a shark*, the hearer may consider other options apart from the predatory nature of sharks (he may think that John can swim like a shark or can be as strong as a shark). This fact has been empirically demonstrated by Glucksberg (2001, 2006) through a series of psycholinguistic experiments.

However, this is not always the case. If we consider expressions like *He is as meek/gentle as a lamb* and *He is as innocent as a lamb*, we highlight different (although somehow related) behavioral features of lambs. In similar ways, *She eats like a bird* and *She sings like a bird* point out two prototypical (i.e. highly salient) properties of birds (i.e. singing very well and eating very little, respectively) that can be metaphorically mapped onto the behavior of a person. The cognitive mechanisms involved in the understanding of these idiomatic expressions are identical: we single out an attribute of the animal in the source domain and map it to the target domain.

Let us now consider more complex instantiations of simile-based idiomatic expressions with underlying ontological metaphors. Consider examples (11)-(13) below:

- (11) He eats like a pig.
- (12) He behaves like a pig.
- (13) He sweats like a pig.

These similes have their bases on the ontological metaphor *He is a pig*. In Lakoff and Turner's (1989) terminology, this metaphor exploits the Great Chain of Being: human beings inherit all those properties attributable to animals and inferior beings. However, the full understanding of their meanings requires further development of the expression, which is given by the specific verb that highlights the precise property of the entity (animal) in the source domain that we intend to map onto the target domain. Nevertheless, it is only one of them the one that reveals the meaning of the idiom. According to Ruiz de Mendoza (1997), ontological metaphors are invariably made up of only one correspondence. The way in which we make evident the selection of the one correspondence to be mapped from the source to the target domain is usually linguistic,

but the context may make explicit non-linguistic allusions to the highlighted characteristic unnecessary. There are several correspondences, but only one is exploited. So if we say *John is a pig*, we need additional (contextual or linguistic) information that guides our understanding of John as someone who eats in a disgusting manner, someone who behaves in a chauvinist way, someone who sweats a lot, etc. If we say *John is a pig* after Mary has been telling us how badly he has treated her, and what a nasty womanizer he is, the background context makes it easy to guess which feature of pigs is being applied to John. However, this may not be the case, and we may be in a situation in which nothing about John has yet been said, so stating *John is a pig* may not be enough. This is not a problem in the case of simile. Thus, when we utter *John eats like a pig* we linguistically place the focus of our attention on the one correspondence of the underlying metaphor that interests us most to the detriment of the others. We may then postulate that metaphors that enclose more than one potential correspondence give rise to a number of idiomatic expressions with the aim of clarifying the feature of the animal that we intend to map onto the human being. It is also important to note that most of the features highlighted in these idiomatic expressions are motivated by the animal appearance or behavior. Saying that someone eats like a pig establishes a link between the amount/way in which a pig and a person eat. However, we may come across more complex situations. Thus, when we say that a person (especially a man) is “a pig” (i.e. behaves like a pig) we do not have empirical reasons to link the person’s socially unacceptable behavior or opinions to the behavior of a pig. In this case, the filthiness of a pig is metaphorically understood as “dirty” behavior: we make use of the additional metaphor MORALITY IS CLEANLINESS (cf. Lakoff, 2003: 98 for a more detailed study of this metaphor). Here we have a clear case of a single-source metaphorical complex, in which two metaphors interact in the following way:

PEOPLE ARE ANIMALS

MORALITY IS CLEANLINESS (LACK OF MORALITY IS FILTH)

SOURCE →	TARGET
Pig	John
lack of cleanliness (‘filth’)	lack of morality

Fig. 6. *Single-source metaphorical complex in John is a pig*

The importance of this analysis will be more evident if we compare it with standard analysis of PEOPLE ARE ANIMALS in the Cognitive Linguistics literature. We have two different approaches. A particularly well-known one was proposed by Lakoff and Turner (1989). According to these authors, this metaphor brings out a so-called “quintessential” attribute of animals that is previously obtained on the basis of the converse metaphor ANIMALS ARE PEOPLE. For example, in *Achilles is a lion* we attribute courage to Achilles because we think of lions as “courageous” animals. But ‘courage’ is a human property, not a property of animals; the reason why we think of lions as having courage is that we interpret their instinctual fierceness in terms of human courage. For Lakoff and Turner (1989) these two converse metaphors cancel each other out thus giving rise to the conventional ascription of animal ‘courage’ to humans. Ruiz de Mendoza (1998, 2010) gives a different account. Rather than two converse metaphors that cancel each other out, what we have is a mapping from animal behavior (a lion seen as instinctively fierce and aggressive when fighting other animals or when chasing and killing its prey) to corresponding human behavior (Achilles as a fierce and aggressive warrior chasing and fighting his enemy in an instinctual way). Ruiz de Mendoza’s explanation is more elegant than Lakoff and Turner’s for two reasons. First, it avoids the need to postulate two metaphors that contradict each other, which does not seem to be too economical in cognitive terms, especially if we are only dealing with the attribution of one feature to Achilles (i.e. courage). Second, the explanation does not fall into the trap of naively reducing the whole range of meaning implications that the ‘lion’ metaphor can have to just one property. In fact, the metaphor highlights Achilles’ undeterred instinctive fierceness when fighting, which is much more than attributing ‘courage’ to him. However, following the logic of Ruiz de Mendoza’s account of PEOPLE ARE ANIMALS, *My neighbor is a pig* would be a matter of finding something in the behavior of pigs that can correspond to the speaker’s neighbor’s behavior. Since pigs are not inherently immoral or abusive, we need an account that allows for the consideration of metaphorical complexes, as we have done above. In the case of the ‘pig’ metaphor the metaphorical complex combines PEOPLE ARE ANIMALS with IMMORALITY IS FILTH. Interestingly enough, Ruiz de Mendoza’s later work on metaphorical complexes can round off his previous explanations of some cases of ontological metaphor.

Example (13), *He sweats like a pig*, calls for a different type of analysis. We know that pigs do not sweat a lot. However, the fact that pigs are dirty animals is one of their more salient attributes. Moreover, if a person is dirty, this can be a consequence of sweating. We thus establish a metonymic connection between sweating and being dirty (CAUSE FOR EFFECT), and a metaphoric mapping between the filth of pigs and the consequence of sweating in a person:

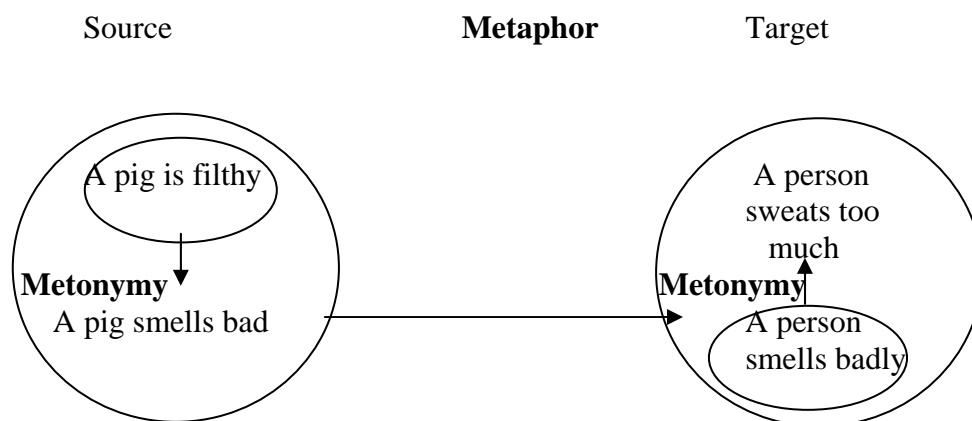


Fig. 7. *He sweats like a pig*.

In other words, in *He sweats like a pig* we map a pig's filth (cause) and its stench (effect) onto a person's ill-smelling sweat (cause) and the disgust that it produces (effect). The cognitive operations that underlie the analysis of this idiom is schematized in figure 8 below. It should be noted that this figure represents another metaphor-metonymy interaction pattern which is to be added to the proposals in Ruiz de Mendoza and Díez (2002).

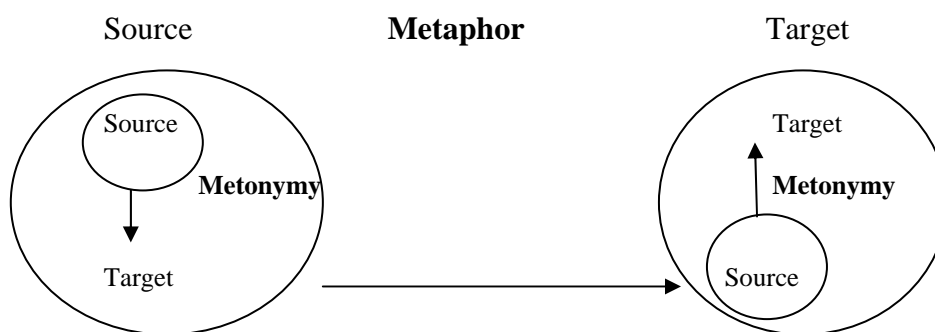


Fig. 8. *Metonymic expansion of the source and target metaphoric domains*.

On the basis of our analysis, we may suggest that there are different degrees of transparency within the array of idioms that arise from the same ontological metaphor.

When we talk about transparency, we refer to simplicity as regards the number and complexity of the cognitive operations involved. Some of them make use of inherent properties and others need to be arranged according to the conventional implications that make up for the initial lack of transparency.

Compare now the following idiomatic expressions:

- (14) He swims like a fish.
- (15) He drinks like a fish.
- (16) I felt like a fish out of water.

The meaning of (14) is fully transparent: swimming is an ability which is inherent to fishes, so swimming in the same way fishes do means that a person can swim very well. The metaphor underlying this idiomatic expression is ontological, as we find only one correspondence between the source and the target metaphorical domains. However, the fact that there is more than one potential correspondence to be mapped gives rise to an idiomatic expression that contains a verb with the aim of specifying the specific connection that we want to establish between the source and the target domains. At first sight, (15) seems to follow the same pattern as (14). However, the action within the source domain to which the metaphor appeals is not so easily apprehended: the metaphoric source has a fish in water which we imagine as drinking water all the time; there is no effect of drunkenness in the fish. The target has a person that drinks too much alcohol and we see his heavy drinking as if it were the constant drinking of a fish in water. What is interesting about this metaphor is that the target domain has a drunken person, but the fish in the source is not drunk. The drunkenness is obtained in the metaphorical target by way of implication (inference) once the basic metaphorical layout has been worked out: since we see the person as immersed in alcohol as a fish in the water, we infer that the person experiences the effects of an exaggerated contact with alcohol.

Thus even though this idiom seemed so similar to (14) in terms of its linguistic structure, upon closer inspection, it turns out that the complexity of the cognitive operations underlying it is higher.

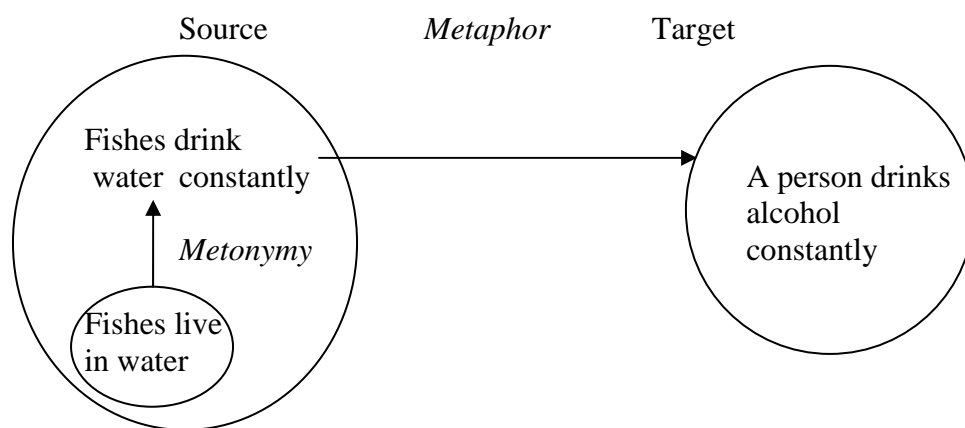


Fig. 9. *He drinks like a fish.*

It is clear that (16) invokes a situation. In this case, the underlying metaphor does not seem to fall within the category of ontological metaphors, as it does not appeal to a quality of fishes, but rather to an ideal state (being in water). The situation mentioned in the idiomatic expression immediately leads us to think about the state in which a fish would be: unable to breathe, struggling to survive. This situation maps onto the anxiety a person may feel in a situation in which he does not feel comfortable.

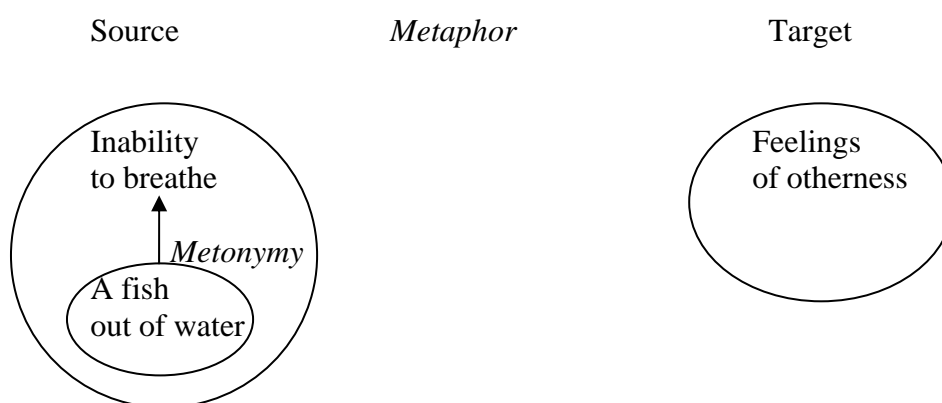


Fig. 10. *I felt like a fish out of water.*

This pattern, which is fairly productive in our corpus of analysis, can be schematized as follows:

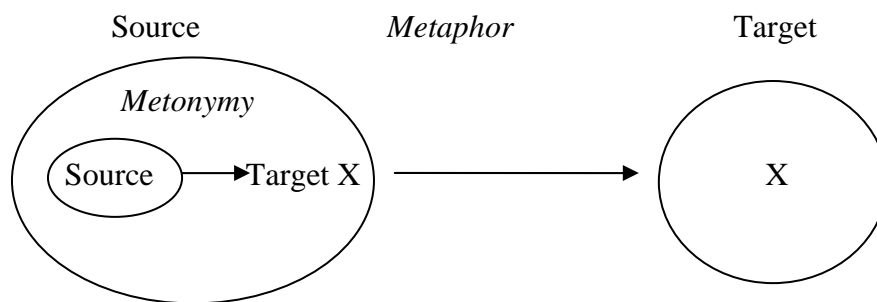


Fig. 11: *Metonymic expansion of the source domain.* (Ruiz de Mendoza and Otal, 2002)

Following Ruiz de Mendoza and Otal's (2002) taxonomy, this is a case of scenic metaphor (if we focus our attention on the nature of the metaphorical mapping). Thus, although the underlying metaphor can be considered to be ontological (PEOPLE ARE ANIMALS), the resulting metaphor is situational. As this metaphor falls into the category of emotion metaphors, let us analyze other simile-based idiomatic expressions that are not exclusively related to the realm of feelings. In this connection, consider examples (17)-(19) below:

- (17) He left (like a dog) with his tail between his legs.
- (18) He got up (like an animal) on his hind legs.
- (19) He left like a bat out of hell.

These are examples in which the underlying metaphors are situational, that is, the expressions mention a part of a situation that is expanded metonymically within the source domain of the metaphor, and which is then mapped onto the metaphorical target. Nevertheless, there are differences in their analyses. Examples (17) and (18) follow similar patterns. In both idioms, the linguistic element that establishes the comparison ('like a dog' and 'like an animal' respectively) is omitted. This is so because the situations invoked are conventionally attributed to dogs in (17) and to animals in general in (18). By mentioning a part of a conventional situation in (17) (a dog with his tail between its legs), we trigger access to the whole situation (the dog has been beaten and leaves feeling scared). In (18), we similarly have access to the complete situation (i.e. an animal ready to attack) by mentioning only the physical posture that it adopts. In both cases, once the metaphorical source domain has been metonymically expanded, it is metaphorically mapped onto the target domain in order to talk about the behavior of a

human being in terms of the behavior of an animal. As both situations can be observed, the metaphors underlying these two idiomatic expressions fall within the category of scenic situational metaphors.

These two idiomatic expressions can be cognitively analyzed following the pattern in figure 4, that is, metonymic expansion of a single-source metaphorical complex.

The analysis of (19) follows the pattern of interaction described in figure 8 (metonymic expansion of the metaphorical source domain). However, there is a difference that should be pointed out, since in this case the situation depicted in the source is not real. This idiom departs from the hypothetical assumption that there is a hell and that there are bats in hell. Of course, 'hell' is used to indicate a place filled with fire. Bats avoid heat and live in dark places, so hell would be the worst possible place for a bat. Therefore in the hypothetical source domain, we have the fictional situation of a bat flying away as fast as possible in order to escape a place where there is excess of heat and of light. But this situation is invoked through a metonymy that links the image of bats escaping hell and the way in which they would logically leave (hurriedly). Metonymy thus works, as noted by Panther and Thornburg (2004) in relation to scripted knowledge, as an inferential schema.

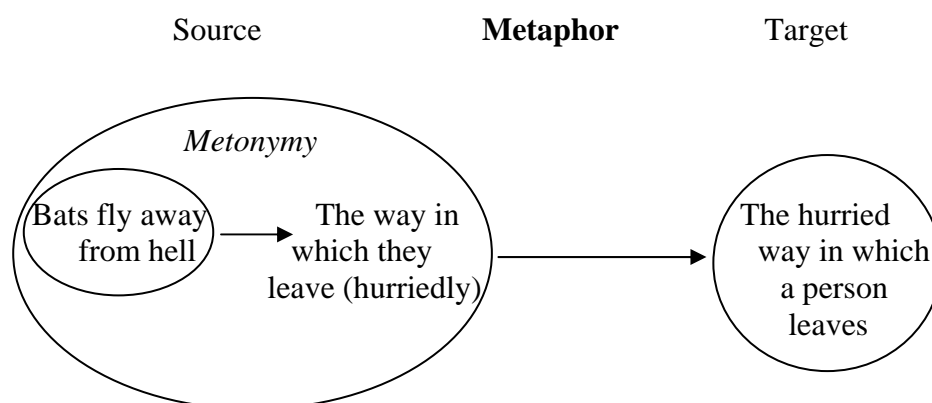


Fig. 12. *He left like a bat out of hell.*

Note that this analysis would seem to flout one of the assumptions of Conceptual Metaphor Theory, according to which the source domain must be tangible or conceptually fixed. Nevertheless, the concept of hell is firmly rooted in our culture, and conventionally regarded as an imaginary place where nobody would want to stay. As a result, the image of bats fleeing a place like that is strong enough to generate a metaphor. In fact, other metaphors arise from the heaven/hell dichotomy (e.g. *I feel in heaven*, *This tastes like heaven*), in which the source domain cannot be strictly said to be tangible. Thus, despite the hypothetical nature of the source domain, the feasibility of this CMT tenet remains intact.

Some of these examples combine metaphor or simile with hyperbole. Herrero (2009) has discussed hyperbole as a cognitive operation on its own. On the basis of previous work in Ruiz de Mendoza and Santibáñez (2003), Ruiz de Mendoza (2010) has recently discussed hyperbole in terms of a cognitive mapping where the source is a hypothetical domain which contains an extreme case of a scalar concept or situation, and the target a real world situation that we want to talk about. For example, ‘a bat out of hell’ is a hypothetical source that contains an exaggeration ingredient. In interpretation, the exaggeration has to be mitigated, according to Herrero (2009), in order to make it reasonable. As a side-effect of the mitigation operation, the addressee is led to calculate added meaning effects by means of a relevance-driven pragmatic process (along the lines proposed by Sperber and Wilson, 1995 for other types of interpretation). In Ruiz de Mendoza and Santibáñez (2003), it is suggested that we have a conceptual mapping from a hypothetical source to a real-world target. As a result of the mapping, a number of extra meaning effects arise: the protagonist leaves a place in fear but probably in not as much fear as a bat would escape from the extreme heat of hell. The hypothetical situation has the effect of enhancing the psychological impact on the protagonist of the real-world situation. This means that the exaggeration arises from the mapping, i.e. from confronting the hypothetical and the real situation. The mitigation operation is only necessary to bring down the exaggeration effect to reasonable proportions, i.e. from ‘absolutely horrified’ to ‘very frightened, more than normal’.

We have observed that most of the simile-based idiomatic expressions arise from the ontological metaphor PEOPLE ARE ANIMALS. If we bear in mind Lakoff and Turner’s (1989) Great Chain of Being, animals are the closest to human beings in the

chain, that is, the ones that share the highest number of similarities. That is why it may seem logical to state that, since animals and human beings share many characteristics, it is easier to talk about one in terms of the other. However, idiomatic expressions also arise from features of other physical entities connected with human beings. As previously stated, the nature of these connections is variable, from very simple one-correspondence mappings to complex patterns of interaction between several cognitive operations. To illustrate, consider (20) and (21) below:

(20) He is (like) a pain in the neck.

(21) He sticks out like a sore thumb.

These two expressions share the same simple cognitive operation: talking about a concrete aspect of reality in order to come to terms with a more abstract one. A pain in the neck is something that bothers us, so a person that we would call like that is someone we do not like, someone who makes us feel uncomfortable. Example (21) follows a similar reasoning schema: when we have a sore thumb, this is quite noticeable, and we seem to be aware of it all the time. Thus, when we talk about a person in terms of a sore thumb, we map this property onto a human being.

Let us now analyze other examples of simile-based idioms involving inanimate entities whose underlying cognitive operations are more complex. Consider (22) and (23) below:

(22) He sleeps like a log.

(23) He smokes like a chimney.

In these idioms, an activity that is exclusively human is attributed to an object. However, there are significant differences concerning cognitive operations, so we may analyze them in turn. Example (22) highlights some properties of logs that assimilate them to a person who is deeply sleeping: lack of mobility and heaviness. Therefore, these features are metaphorically mapped to the source domain: a heavy and motionless person. This needs a further turn to achieve the intended interpretation: a heavy and motionless person stands for a person who is sleeping in a very deep way, so we need a

metonymic link: EFFECT FOR CAUSE, that is, we mention the effect to refer to the cause.

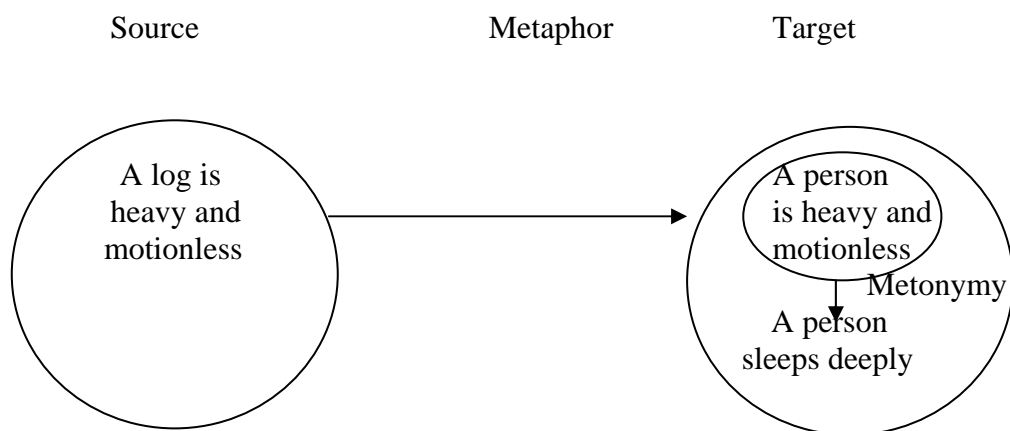


Fig. 13. *He sleeps like a log.*

We have thus a different pattern of conceptual interaction as schematized in figure 14:

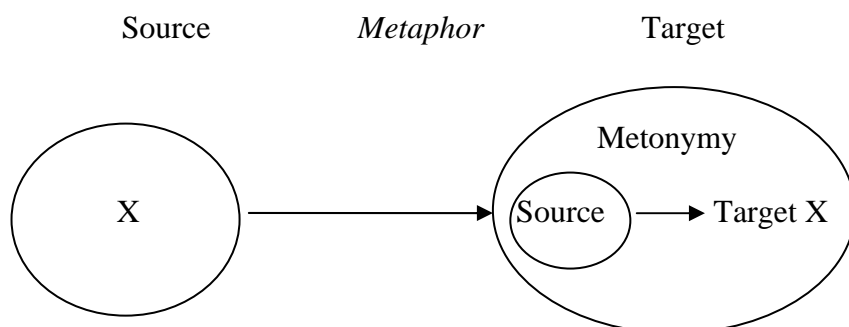


Fig. 14. *Metonymic expansion of the metaphorical target domain.*

In the case of (23), the cognitive process is very similar: chimneys do not smoke, but there is something in them that reminds us of a person who is smoking: the smoke coming out of them. In our view, what makes this expression different is the fact that the imagistic component is stronger: we can easily picture smoke coming out of a chimney and map it onto smoke coming out of a person's mouth. Then, we need the metonymic link between a person expelling smoke and a person smoking a cigarette: EFFECT FOR ACTION.

Note that these two examples also bear a strong hyperbolic component: a person cannot be as motionless as a log, even when he is in a very deep sleep. By the same token, a person cannot expel as much smoke as a chimney. These idiomatic expressions

suggest that logs sleep and that chimneys smoke respectively, which are unreal situations that, as mentioned above, strengthen the impact of the intended meaning.

The hyperbolic nature of many simile-based idioms is pervasive. Consider example (24) below:

(24) It's like I have a frog in my throat.

The meaning conveyed by this idiomatic expression is that a person has some difficulty in his/her speech due to a small amount of mucus in his/her throat. The linguistic expression depicts an unreal situation, that is, a frog inside a person's throat. This unreal situation metonymically leads us to the feeling it would cause to have a frog in one's throat, but of course with a high degree of exaggeration: a frog in one's throat would cause the person to choke rather than to have difficulty speaking. Note that the color of the mucus singles out the choice of the object that could be blocking someone's throat in the source domain of the metonymic mapping. The resemblance between mucus and frogs can also be extended to their soft texture and slimy nature.

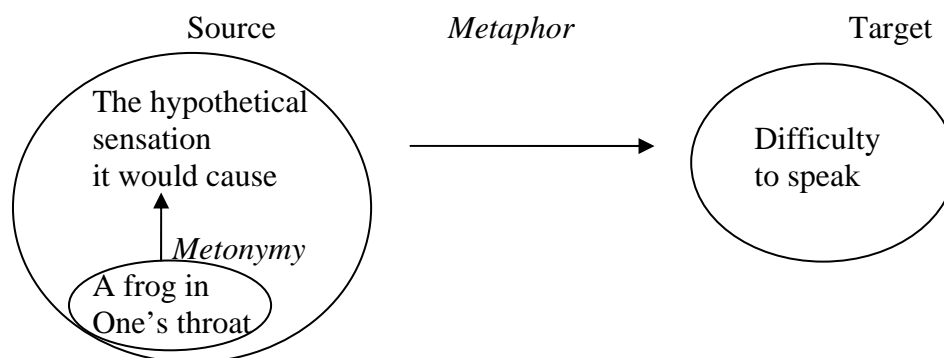


Fig. 15. *It's like I have a frog in my throat*

Example (25) follows a complex pattern in line with Ruiz de Mendoza's (2008) metaphoric complexes:

(25) His memory is like a sieve.

Several metaphors interact for the understanding of this idiomatic expression:

THE MEMORY IS A CONTAINER

THOUGHTS (MEMORIES) ARE PHYSICAL OBJECTS

The metaphoric complex that arises from this expression combines image-schematic metaphors (the CONTAINER schema and a variant of the IDEAS ARE OBJECTS metaphor) with a metaphor in which the source domain is imagistic in nature: when something is put on a sieve, a great part of it gets out of the sieve due to the holes in it. The cognitive structure of this idiomatic expression falls within the category of single-source metaphorical complex discussed above. The metaphor MEMORY IS A CONTAINER is built into the source-target structure of the metaphor THOUGHTS (MEMORIES) ARE PHYSICAL OBJECTS. Objects that are out of the container are not under the effects of this container anymore. As we metaphorically assume that the memory is a container, we may also assume that the effect of being within this container is being remembered. Therefore, when the container has holes, it is likely that objects get easily out of it, thus letting thoughts out of the memory and being consequently forgotten.

SOURCE →	TARGET
Objects	Thoughts
Objects easily escape the container through physical holes	Thoughts easily leave someone's memory
Container	Memory

Fig. 16. *His memory is like a sieve.*

What is also worth mentioning in this example is the fact that this metaphorical complex allows the combination of image and image-schema metaphors. On the one hand, the source domain bears a high degree of imagistic content. When this expression is uttered, we have quick access to the image of a sieve, full of holes, letting fluid and small particles escape through it. This strong imagistic component is in this case essential for the interpretation of the idiom. In addition, the metaphor that is integrated within the source-target metaphoric process is image-schematic: we are making use of the CONTAINER schema.

The fact that these two ICMs cooperate within the same idiomatic expression leads us to wonder whether image and image-metaphors are so different in nature.

According to Lakoff, image metaphors are “one-shot”, in the sense that this kind of metaphor maps only one image from the source onto the target domain; therefore, conceptual correspondences are allowed in image metaphors. In turn, image-schematic metaphors do license conceptual correspondences, which are in fact an essential characteristic of their abstract nature grounded in physical experience. This matter has drawn the attention of some scholars; Rosario Caballero (2003, 2006) claims that there should be no sharp division between conceptual and imagistic metaphors. Using a selection of expressions from the architectural jargon she intends to demonstrate that image metaphors can indeed map patterns of inference and conceptual knowledge from the source to the target metaphorical domains (cf. also Deignan, 2007). However, Galera Masegosa (2010) has pointed out that upon a closer analysis of Caballero’s corpus we may assume that there is a continuum of cases in which metaphors would range from purely imagistic metaphors (Lakoff’s one-shot imagistic metaphors) to metaphors whose abstract nature leads us to consider them to be closer to image-schematic metaphors (cf. Peña, 2003, 2008). In the middle of this continuum we would find conceptual metaphors that select only one imagistic feature (a combination of images and conceptualizations). Let us see an example of each of these metaphor types (Caballero, 2003):

(i) The basic structure “started with a *bowstring truss* we took out of the building”.

In this metaphor we find two images (one in the source and another in the target domain) that merge into one in the process of metaphorical mapping, so there are no conceptual correspondences. Thus, this metaphor is purely imagistic in nature.

(ii) Many architects regard their built artefacts as (...) having ‘wrinkles’ of growing ‘bellies’.

These metaphors fall in the middle of the continuum: they are conceptual in nature in the sense that they are closely related to the concept of shape, but there is only one feature that is mapped.

(iii) The decision to air-condition lower-floor public spaces required ingenious *weaving of ductwork* in ceilings.

In this case, since physical structure is involved, and thus bearing in mind the abstract nature of the source domain, the metaphor should be regarded as being closer to image-schematic metaphors.

Example (25) shows a case in which the two extremes of the continuum merge into one metaphoric complex. The source domain of the metaphor clearly falls within the one-shot imagistic metaphors extreme. However, the target domain is not physical, but rather a mental construct that we make up in inspired by the physical image. So the first ‘anomalous’ phenomenon that we find in example (25) is the fact that the main metaphor of the metaphoric complex conjoins a purely imagistic source domain and an abstract target domain. Actually, in spite of the imagistic nature of the source domain, the main metaphorical is also aided by a conceptual metaphor: THOUGHTS ARE OBJECTS. On the other hand, we have the clear image-schematic nature of the metaphor that contributes to the final interpretation of the metaphoric complex, that is, MEMORY IS A CONTAINER, which belongs to the other extreme of the continuum due to its abstract nature.

There is a simile-based idiomatic expression in Spanish that makes use of the same patterns of conceptual reasoning: *Está como una regadera* (lit. ‘He is like a watering can’), which is equivalent to the English idiom *He has a screw loose*, which means that he is crazy/nuts). We can state that the source domain of the metaphor that underlies the expression *Está como una regadera* is imagistic in the sense of Lakoff’s one-shot image metaphors: we find water pouring through the holes of the watering can. This image is mapped onto the target domain, which is not purely imagistic, but rather conceptually constructed on the basis of the physical image of the source domain: we mentally picture a head full of holes from which thoughts escape. Thus, we also make use of the metaphor PHYSICAL OBJECTS (WATER) ARE THOUGHTS. In this case the metaphor that is integrated within the source-target correspondences of the metaphoric complex is THE HEAD IS A CONTAINER. However, the implications that arise from the fact that thoughts get out of the container easily goes beyond the mere forgetting. This expression suggests that the lack of objects (thoughts) within the container (head) has craziness as a consequence. Nevertheless, what is important here is the fact that the same metaphoric complex that conjoins image and image-schematic metaphors operates in both languages in the creation of simile-based idioms.

5. Conclusions

From the analysis of the examples of our corpus we may contend that ontological metaphors range from those in which one single possibility is available for the mapping to those in which there is more than one potential correspondence. The latter are the ones that give rise to simile-based idiomatic expressions. Thus, idiomatic expressions whose underlying metaphor is ontological arise from: (i) the necessity of pinning down which feature is to be mapped when more than one correspondence is available for the metaphoric mapping; (ii) the lack of empirical reasons in the connection of the entity and the attributed feature.

We have found that the simile-based idiomatic expressions that arise from the same ontological metaphor often differ as regards the complexity of the necessary cognitive operations for the understanding of their meanings. For example, we have seen that from the metaphor *He is a fish* we may get different idiomatic expressions that call for different cognitive analyses (*He swims like a fish* only needs a simple one-correspondence metaphorical mapping; *I felt like a fish out of water* is cognitively analyzed in terms of a metaphoric mapping in which the metaphoric source is metonymically expanded; *He drinks like a fish* follows the same conceptual pattern as the previous one, but needs the aid of implication (inference) for the complete understanding of the idiom.

We have also observed that the degree of motivation in the creation of simile-based idioms varies intralinguistically. Intralinguistic motivation ranges from examples like *It is like shooting fish in a barrel*, in which the easiness of the situation mentioned is carried over to a real life situation, to others like *It is as easy as pie*, where there the motivation is far from transparent at all. In the middle we find idiomatic expressions like *It is as easy as ABC*, in which there is certain degree of transparency. Differences as regards motivation are also found cross-linguistically. We saw that there is no motivation in expressions like *He is as happy as a clam* or *He is as happy as Harry*. Other expressions that make reference to happiness like *He is as happy as a lark* are based on a conventional association between larks and happiness, which is also reflected in expressions like *To do something for a lark*. Its Spanish counterpart, *Es más feliz que una perdiz* (lit. 'He is happier than a partridge') grounds its motivation in rhyming, while *Está como unas castañuelas* (lit. 'He is like castanets') is based on an

object that is used in a typical Spanish situation of a happy time. However, there are also conceptual patterns of mental associations that can be found in both languages: *His memory is like a sieve* and *Está como una regadera* hold on to the same set of cognitive operations, which involve image and image-schematic metaphors in combination to get to a non-imagistic target domain. From the discussion of these cases, we may suggest that the division between conceptual and image one-shot metaphors should not be as sharp as Lakoff claimed. Rather, we should consider different gradations from pure imagistic metaphors to those that are closer to be image-schematic, thus bearing in mind the possibility of combining them within the same expression.

Metaphor-metonymy interactions and metaphoric complexes have proved to be essential in the understanding of many of the idioms analyzed in this article. Therefore, simplistic views of these cognitive operations should be discarded in many cases.

As regards hyperbole, we should remark that its use is pervasive in simile-based idiomatic expressions, especially when the source domain of the metaphoric mapping mentions and metonymically expands a hypothetical situation that exaggerates a real-world situation.

Even though the study of idioms has received a great deal of attention over the last two decades, further exploration is needed as regards the complex cognitive operations that rule their interpretation. This article has attempted to be a starting point from which more detailed taxonomical classifications may be established by expanding the scope from simile-based idioms to other realizational configurations.

Received: June 14, 2010

Accepted: June 30, 2010

Published: September 30, 2010

References

- Barcelona, A. 2000. *Metaphor and Metonymy at the Crossroads: A Cognitive Perspective*. Berlin/New York: Mouton de Gruyter.
- Barcelona, A. 2005. "The multilevel operation of metonymy in grammar and discourse, with particular attention to metonymic chains". *Cognitive Linguistics. Internal*

- Dynamics and Interdisciplinary Interaction*, Eds. F. Ruiz de Mendoza and S. Peña Berlin/New York: Mouton de Gruyter. 313-352.
- Bobrow, S.A. and S.M. Bell. 1973. "On Catching on to Idiomatic Expressions", *Memory and Cognition*, 1(3): 343-346.
- Caballero, R. 2003. "Talking about space: Image metaphor in architectural discourse". *Annual Review of Cognitive Linguistics* 1: 87-105.
- Caballero, R. 2006. *Re-Viewing Space. Figurative Language in Architects' Assessment of Built Space*. Berlin/New York: Mouton de Gruyter.
- Cacciari, C. and S. Glucksberg. 1991. *Understanding Word and Sentence*. Amsterdam: G.B. Simpson, Elsevier Science Publisher.
- Cacciari, C. and S. Glucksberg. 1994. "Understanding Figurative Language". *Handbook of Psycholinguistics*. Ed. M.A. Gernsbacher. New York: Academic Press. 447-477.
- Cacciari, C. and P. Tabossi. 1988. "The Comprehension of Idioms". *Journal of Memory and Language*, 27: 668-683.
- Chomsky, N. 1980. *Rules and Representations*. Oxford: Basil Blackwell Publisher.
- Croft, W. 2001. *Radical Construction Grammar: Syntactic Theory in Typological Perspective*. Oxford: Oxford University Press.
- Deignan, A. 2007. "'Image' metaphors and connotation in everyday language" *Annual Review of Cognitive Linguistics* 5: 173-192
- Dirven, R. and F. J. Ruiz de Mendoza Ibáñez. fc. "Looking back at 30 years of Cognitive Linguistics". *Cognitive Linguistics in Action: from Theory to Application and Back*. Eds. E. Tabakowska, M. Choinski and L. Wiraszka. Berlin/New York: Mouton de Gruyter; in press.
- Eizaga Rebollar, B. 2002. *Procesamiento de Modismos: un Enfoque Psico-Pragmático*. Universidad de Cádiz.
- Evans, V. and M. Green. 2006. *Cognitive Linguistics. An Introduction*. Edinburgh: Edinburgh University Press Ltd.
- Everaert, M., E. Van der Linden, A. Schenk and R. Schreuder. 1995. "Introduction". *Idioms: Structural and Psychological Perspectives*. Hillsdale, New Jersey: Erlbaum Associates, Inc. Publishers, 1-14.
- Fauconnier, G. and M. Turner. 1996. "Blending as a central process in grammar". *Conceptual Structure, Discourse, and Language*. Ed. A. Goldberg. Stanford, Cal.:

- Cambridge University Press. 113-130.
- Fauconnier, G. and M. Turner .1998. "Conceptual integration networks". *Cognitive Science* 22 (2): 133-187.
- Fauconnier, G. and M. Turner. 2002. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities*. New York: Basic Books.
- Fillmore, C.J. and B.T.S. Atkins. 1992. "Towards a frame-based lexicon: The semantics of RISK and its neighbors". *Frames, Fields, and Contrast: New Essays in Semantics and Lexical Organization*. Eds. A. Lehrer and E. Kittay. Hillsdale, NJ: Lawrence Erlbaum Associates. 75-102.
- Fernando, C. 1996. *Idioms and Idiomaticity*. Oxford: Oxford University Press.
- Fillmore, C.J., P. Kay and M.C. O'Connor. 1988. "Regularity and Idiomaticity in Grammatical Constructions: The Case of Let Alone". *Language*, 64(3): 501-538.
- Fogelin, R. 1988. *Figuratively Speaking*. New Haven: Yale University Press.
- Galera Masegosa, A. 2010. "Metaphoric complexes: a Spanish-English contrastive analysis of metaphor and metonymy in interaction". *Revista Española de Lingüística Aplicada*, 23. In press.
- Geeraerts, D. 2003. "The interaction of metaphor and metonymy in composite expressions". *Metaphor and Metonymy in Comparison and Contrast*. Eds. R. Dirven and R. Pörings. Berlin/New York: Mouton de Gruyter. 435-468.
- Gibbs, R. 1980. "Spilling the Beans of Understanding and Memory for Idioms in Conversation". *Memory and Cognition*, 8(2): 149-156.
- Gibbs, R. 1990. "Comprehension of Figurative Referential Descriptions". *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 16: 56-66.
- Gibbs, R. 1994. *The Poetics of Mind: Figurative Thought, Language, and Understanding*. New York: Cambridge University Press.
- Gibbs, R. 1998. "The Fight over Metaphor in Thought and Language". *Figurative Language and Thought*. Eds. A. Katz, C. Cacciari, R. Gibbs and M. Turner. New York: Oxford University Press. 88-118.
- Gibbs, R. and G. Steen. 1999. *Metaphor in Cognitive Linguistics*. Amsterdam/Philadelphia: John Benjamins.
- Gibbs, R. and N.P. Nayak. 1989. "Psycholinguistic Studies on the Syntactic Behavior of Idioms". *Cognitive Psychology*, 21: 100-138.

- Gibbs, R., N.P. Nayak and C. Cuttin., 1989. "How to Kick the Bucket and not Decompose: Analizability and Idiom Processing." *Journal of Memory and Language*, 28 (576-593).
- Gibbs, R. and G. Van Orden. 2003. "Are emotional expressions intentional? A self-organizational approach". *Consciousness & Emotion*, 4, 1-14.
- Goossens, L. 1990. "Metaphonymy: the Interaction of Metaphor and Metonymy in Expressions for Linguistic Action". *Metaphor and Metonymy in Comparison and Contrast*. Eds. R. Dirven and R. Pörrings. Berlin/New York: Mouton de Gruyter. 349-378.
- Glucksberg, S. 1991. "Beyond Literal Meanings: The Psychology of Allusion". *American Psychological Science*, 2(3): 146-152.
- Glucksberg, S. 1993. "Idioms Meaning and Allusional Content". *Idioms: Processing, Structure and Interpretation*. Eds. Cacciari, C. and P. Tabossi. Hillsdale, New Jersey: Erlbaum Associates, Inc. Publishers. 57-78.
- Glucksberg, S. 2001. *Understanding Figurative Language: From Metaphor to Idioms*. Oxford: Oxford University Press.
- Glucksberg, S. 2006. "On the Relation Between Metaphor and Simile: when Comparison Fails". *Mind and Language* 21(3): 360-378.
- Glucksberg S., M. Brown and M.S. Mc Glone. 1993. "Conceptual Metaphors are not Automatically Accessed during Idiom Comprehension". *Memory and Cognition*, 21: 711-719.
- Hampe, B. (ed.) 2005. *From Perception to Meaning: Image Schemas in Cognitive Linguistics*. Berlin/New York: Mouton de Gruyter
- Harris, R. and Taylor, T.J. 1996. *Landmarks in Linguistic Thought: The Western Tradition to Socrates and Saussure*. London: Routledge.
- Hernando Cuadrado, L.A. 1990. "Sobre las unidades fraseológicas en español". *Actas del Congreso de la Sociedad Lingüística de la Sociedad Española de Lingüística. XX Aniversario* (Tenerife 2-6 de abril de 1990) II: 536-547. M^a.A. Álvarez Martínez. Madrid: Gredos.
- Herrero Ruiz, J. 2009. *Understanding Tropes: At the Crossroads between Pragmatics and Cognition*. Frankfurt/Main: Peter Lang.
- Keysar, B. and B. Bly. 1995. "Intuitions of the Transparency of Idioms: Can One Keep a Secret by Spilling the Beans?" *Journal of Memory and Language*, 34: 89-100.

- Keysar, B., Y. Shen, S. Glucksberg and W. Horton. 2000. "Conventional Language: How Metaphorical Is It?" *Journal of Memory and Language*, 43, 576-593.
- Kövecses, Z. and P. Szabó. 1996. "Idioms: A view from Cognitive Semantics". *Applied Linguistics*, 17(3): 326-355.
- Kövecses, Z. 2000. *Metaphor and Emotion*. Cambridge: Cambridge University Press.
- Kövecses, Z. 2002. *Metaphor: A Practical Introduction*. Oxford: Oxford University Press.
- Kövecses, Z. 2005. *Metaphor in Culture: Universality and Variation*. Cambridge: Cambridge University Press.
- Kreuz, R.J. and A.C. Graesser. 1991. "Aspects of Idioms Interpretation: Comment on Nayak and Gibbs". *Journal of Experimental Psychology: General*, 120(1): 90-92.
- Lakoff, G. 1987. *Women, Fire and Dangerous Things: What Categories Reveal About the Mind*. Chicago: University of Chicago Press.
- Lakoff, G. 1993. "The Contemporary Theory of Metaphor". *Metaphor and Thought*, 2nded. Ed. A. Ortony. Cambridge: Cambridge University Press. 202-51.
- Lakoff, George. 2003. "The embodied mind and how to live with one", *The Nature and Limits of Human Understanding*. Eds. A. J. Sanford and P. N. Johnson-Laird. T & T. Clark Publishers.
- Lakoff, G. and M. Johnson. 1980. *Metaphors We Live By*. Chicago: Chicago University Press.
- Lakoff, G. and M. Johnson. 1999. *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought*. New York: Basic Books.
- Lakoff, G. and M. Turner. 1989. *More Than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago: University of Chicago Press.
- Lyons, J. 1982. "Deixis and Subjectivity: Loquor, ergo sum?". *Speech, Place and Action: Studies in Deixis and Related Topics*. Eds. R. J. Jarvella and W. Klein. New York: Wiley. 101-124.
- Manser, M.H. 1997. *A Dictionary of Everyday Idioms*. London: Prentice Hall Europe ETL.
- McCarthy, M.J. 1992. "English Idioms in Use". *Revista Canaria de Estudios Ingleses*, 25 (Universidad de la Laguna): 55-65.
- Moon, R. 1998a. *Fixed Expressions and Idioms in English: A Corpus-Based Approach*. Oxford: Clarendon Press.

- Moon, R. 1998b. "Frequencies and Forms of Phrasal Lexemes in English". *Phraseology: Theory, Analysis and Applications*. Ed. A.P. Cowie. New York: Oxford University Press, 79-100.
- Nunberg, G., I.A. Sag and T. Wasow. 1994. "Idioms". *Language*, 70(3): 419-538.
- Nicolas, T. "Semantics of Idiom Modification". *Idioms: Structural and Psychological Perspectives*. Eds. M. Everaert, E. Van der Linden, A. Schenk and R. Schreuder. Hillsdale, New Jersey: Erlbaum Associates, Inc. Publishers. 233-252.
- Ortony, A., D.L. Schallert, R.E. Reynolds and S.J. Antos. 1978. "Interpreting Metaphors and Idioms: Some Effects of Context on Comprehension". *Journal of Verbal Learning and Verbal Behavior*, 17: 465-477.
- Panther, K. and L. Thornburg. 2004. "The role of conceptual metonymy in meaning construction". *metaphorik.de* 06/2004
- Peña Cervel, S. 2003. *Topology and Cognition: What Image-Schemas Reveal about the Metaphorical Language of Emotions*. LINCOM Studies in Cognitive Linguistics. München: Lincolnm.
- Peña Cervel, S. 2008. "Dependency systems for image schematic patterns in a usage-based approach to language. *Journal of Pragmatics* 40(6): 1041-1066.
- Pinker, S. 1994. *The Language Instinct*. London: Penguin Books.
- Pinker, S. 1999. *Words and Rules: The Ingredients of Language*. London: Weidenfeld and Nicholson.
- Pulman, S.G. 1993. "The Recognition and Interpretation of Idioms". *Idioms: Processing, Structure and Interpretation*. Eds. C. Cacciari and P. Tabossi. Hillsdale, New Jersey: Erlbaum Associates, Inc. Publishers. 57-78.
- Ruiz de Mendoza, F.J. 1997. "Metaphor, metonymy and conceptual interaction". *Atlantis*, Vol. 19, 1: 281-295.
- Ruiz de Mendoza, F.J. 1998. "On the nature of blending as a cognitive phenomenon", *Journal of Pragmatics*, 30-3: 259-274.
- Ruiz de Mendoza, F.J. 2000. "The role of mappings and domains in understanding metonymy". *Metaphor and Metonymy at the Crossroads. A cognitive perspective*. Ed. Antonio Barcelona. Berlin: Mouton de Gruyter. 109-132.
- Ruiz de Mendoza, F. J. 2008. "Cross-linguistic analysis, second language teaching and cognitive semantics: The case of Spanish diminutives and reflexive constructions"

- Cognitive Approaches to Pedagogical Grammar*. Eds. S. De Knop and T. De Rycker. Berlin/New York: Mouton de Gruyter. 118-149.
- Ruiz de Mendoza, F. J. 2010. Metonymy and cognitive operations. *What is Metonymy?* Eds. R. Benczes, A. Barcelona and F. J. Ruiz de Mendoza Ibáñez. Amsterdam/Philadelphia: John Benjamins; vol. in preparation.
- Ruiz de Mendoza, F.J. and J. L. Otal Campo. 2002. *Metonymy, Grammar and Communication*. Albolote, Granada: Comares.
- Ruiz de Mendoza, F.J. and O. Díez. 2002. "Patterns of Conceptual Interaction". *Metaphor and Metonymy in Comparison and Contrast*. Eds. R. Dirven and R. Pörrings. Berlin/New York: Mouton de Gruyter. 489-532.
- Ruiz de Mendoza Ibáñez, F. J. and L. Pérez Hernández. 2003. "Cognitive operations and pragmatic implication". *Metonymy and Pragmatic Inferencing*. Eds. K-U. Panther and L. Thornburg. Amsterdam/Philadelphia: John Benjamins. 23-50.
- Ruiz de Mendoza Ibáñez, F. J. and S. Peña Cervel. 2005. "Conceptual interaction, cognitive operations and projection spaces". *Cognitive Linguistics: Internal Dynamics and Interdisciplinary Interaction*. Eds. F.J. Ruiz de Mendoza Ibáñez and S. Peña Cervel. Berlin/New York: Mouton de Gruyter. 254-280.
- Ruiz de Mendoza, F.J. and R. Mairal, 2007. "High-level metaphor and metonymy in meaning construction". *Aspects of Meaning Construction in Lexicon and Grammar*. Eds. Radden, G, K. M. Köpcke, T. Berg, and P. Siemund (eds.) Amsterdam/Philadelphia: John Benjamins. 33-49.
- Ruiz de Mendoza, F. J. and Mairal, R. 2010. "Constraints on syntactic alternation: lexical-constructional subsumption in the Lexical-Constructional Model". *Morphosyntactic Alternations in English. Functional and Cognitive Perspectives*. Ed. P. Guerrero. Equinox; in press.
- Schweigert, W.A. and D.R. Moates. 1988. "Familiar Idiom Comprehension". *Journal of Psycholinguistic Research*, 17(4): 281-296.
- Sperber, D. and D. Wilson. 1995. *Relevance. Communication and Cognition*. 2nd. ed. Oxford: Basil Blackwell.
- Sperber, D. and D. Wilson. 2008. "A deflationary account of metaphor". *Handbook of Metaphor and Thought*. Ed. R. Gibbs. Cambridge: Cambridge University Press. 84-108.

- Steen, G. 2007. *Finding Metaphor in Grammar and Usage. A Methodological Analysis of Theory and Research*. Amsterdam/Philadelphia: John Benjamins.
- Strässler, J. 1982. *Idioms in English: A Pragmatic Analysis*. Tübingen: Gunter Narr.
- Swinney, D.A. and A. Cutler. 1979. "The Access and Processing of Idiomatic Expressions". *Journal of Verbal Learning and Verbal Behaviour*, 18: 523-534.
- Taylor, John R. 1995. *Linguistic Categorization. Prototypes in Linguistic Theory*. Second edition, Oxford: Clarendon Press.
- Titone, D.A. and C.M. Connine. 1994. "Comprehension of Idiomatic Expressions: Effects of Predictability and Literality", *Journal of Experimental Psychology: Learning, Memory and Cognition*, 20 (5): 1126-1138.
- Urios-Aparisi, E. 2009. "Interaction of multimodal metaphor and metonymy in TV commercials: Four case Studies". *Multimodal Metaphor*. Eds. C. Forceville and E. Urios-Aparisi. Berlin/New York: Mouton de Gruyter. 95-118.
- Van de Voort M.E.C. and W. Vonk. 1995. "You Don't Die Immediately When You Kick and Empty Bucket: A Processing View on Semantic and Syntactic Characteristics of Idioms". *Idioms: Structural and Psychological Perspectives*. Eds. M. Everaert, E. van der Linden, A. Schenk and R. Schreuder. Hillsdale, New Jersey: Erlbaum Associates, Inc. Publishers. 283-299.
- Vega Moreno, R. E. 2007. *Creativity and Convention. The Pragmatics of Everyday Figurative Speech*. Amsterdam/Philadelphia: John Benjamins.
- Way, E.C. 1991. *Knowledge Representation and Metaphor*. Oxford: Kluwer Academic Publishers.
- Wilson, D. and R. Carston. 2006. "Metaphor, relevance and the 'emergent property' issue". *Mind and Language* 21: 404-433.
- Wilson, D. and R. Carston. 2008. "Metaphor and the 'emergent property' problem: A relevance-theoretic treatment". *The Baltic International Yearbook of Cognition, Logic and Communication* 3 (2007): 1-40.
- Wright, J., 2002. *Idioms Organiser*. Boston: Thomson.